

Material Declaration Report



Package Type:	TSSOP 20L (4.4mm)
Pericom Package Code:	L20(Pb-free)
RoHS Compliance:	Yes
Applicable Exemption:	N/A

Component Weight (mg):	70.800
Termination Plating:	Matte Tin
JESD 97 Pb-free Category:	e3
Plating Thickness (um):	10~20
Tin Whisker Mitigation:	Anneal, 150C/1hr

MSL Rating:	1
Peak Body Temp (C):	260
Max Time (sec):	40
Reflow Cycles:	3
Rev Date:	9/15/2008

Homogeneous Material Declaration

MATERIAL ITEM	MATERIAL WEIGHT(mg)	ASSEMBLY SUBCON	MATERIAL COMPOSITION	CAS NO.	COMPOSITION %	COMPOSITION WEIGHT(mg)
MOLD COMPOUND	45.022	OSE	Silica Fused	60676-86-0	89.800	40.4298
			Epoxy Resin	Proprietary	5.000	2.2511
			Phenolic Resin	Proprietary	4.000	1.8009
			Others	Proprietary	1.000	0.4502
			Carbon Black	1333-86-4	0.200	0.0900
		SPEL	Silica Fused	60676-86-0	88.000	39.6194
			Epoxy Resin	Proprietary	5.000	2.2511
			Phenolic Resin	Proprietary	4.500	2.0260
			Epoxy, Cresol Novolac	29690-82-2	2.000	0.9004
			Carbon Black	1333-86-4	0.500	0.2251
LEADFRAME	22.570		Copper	7440-50-8	95.140	21.4731
			Nickel	7440-02-0	3.200	0.7222
			Silver	7440-22-4	0.760	0.1715
			Silicon	7440-21-3	0.725	0.1636
			Magnesium	7439-95-4	0.175	0.0395
SILICON DIE	0.962		Silicon (Si)	7440-21-3	99.192	0.9542
			Non-hazardous Metal	Proprietary	0.808	0.0078
DIE ATTACH EPOXY	0.256	OSE	Silver	7440-22-4	76.000	0.1946
			Acrylic Resin	Proprietary	8.000	0.0205
			Acrylate	Proprietary	5.500	0.0141
			Polybutadiene derivative	Proprietary	5.500	0.0141
			Epoxy resin	Proprietary	2.500	0.0064
		SPEL	Additive	Proprietary	1.000	0.0026
			Butadiene copolymer	Proprietary	1.000	0.0026
			Peroxide	Proprietary	0.500	0.0013
			Silver	7440-22-4	80.000	0.2048
			Epoxy Resin	9003-36-5	10.000	0.0256
GOLD WIRE	0.336		Diluent	26447-14-3	6.000	0.0154
			Hardener	620-92-8	3.250	0.0083
			Dicyandamide	461-58-5	0.750	0.0019
			Gold(Au)	7440-57-5	99.990	0.3360
			Impurities	-	0.010	0.0000
SOLDER PLATING	1.655		Tin (Sn)	7440-31-5	99.990	1.6548
			Impurity	-	0.010	0.0002

NOTE: The device contents disclosed are approximated and are based on engineering estimates.

3rd Party Analysis Results (PPM)

MATERIAL	Pb	Hg	Cr+6	Cd	PBB	PBDE
Mold Compound	<2	<2	<2	<2	<5	<5
Leadframe	<50	<2	<2	<2	<5	<5
Device Silicon Die	<2	<2	<2	<2	<5	<5
Die Attach Epoxy	<2	<2	<2	<2	<5	<5
Gold Wire	<2	<2	<2	<2	<5	<5
Solder Plating	<50	<2	<2	<2	<5	<5

ROHS MATERIAL COMPOSITION DECLARATION

EU RoHS Directive 2002/95/EC and China RoHS Directive SJ/T11363-2006	Declaration Statement: Quantity limit of 0.1% (1000 PPM) by mass in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium(Cr+6), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE); and Quantity limit of 0.01% (100 PPM) for Cadmium																	
	<table border="1"> <thead> <tr> <th>Pb</th> <th>Hg</th> <th>Cr+6</th> <th>Cd</th> <th>PBB</th> <th>PBDE</th> </tr> </thead> <tbody> <tr> <td><1000ppm</td> <td><1000ppm</td> <td><1000ppm</td> <td><100ppm</td> <td><1000ppm</td> <td><1000ppm</td> </tr> <tr> <td>O</td> <td>O</td> <td>O</td> <td>O</td> <td>O</td> <td>O</td> </tr> </tbody> </table>	Pb	Hg	Cr+6	Cd	PBB	PBDE	<1000ppm	<1000ppm	<1000ppm	<100ppm	<1000ppm	<1000ppm	O	O	O	O	O
Pb	Hg	Cr+6	Cd	PBB	PBDE													
<1000ppm	<1000ppm	<1000ppm	<100ppm	<1000ppm	<1000ppm													
O	O	O	O	O	O													
<p>O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006. X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.</p>																		